

The Salishan Conference on High-Speed Computing

At-a-Glance Program

Time	Monday	Tuesday	Wednesday	Thursday
8:00 am		Registration / Introduction to Sessions Breakfast	Introduction to Session Breakfast	Introduction to Sessions Breakfast
8:30 am		<p style="text-align: center;">Session 1</p> <p style="text-align: center;">The Fault Environment Chair – Jim Ang</p> <p style="text-align: center;"><i>Building Reliable Chips in Future Technologies: Fact, Fiction, or an Oxymoron?</i> Vikas Chandra ARM</p> <p style="text-align: center;">-----</p> <p style="text-align: center;"><i>The Fault Environment Unveiled</i> Sudhanva Gurumurthi AMD/University of Virginia</p> <p style="text-align: center;">-----</p> <p style="text-align: center;"><i>Resiliency for Reliability – Myths and Truths</i> Shekhar Borkar Intel Corporation</p>	<p style="text-align: center;">Session 3</p> <p style="text-align: center;">System Software and APIs Chair – Ron Brightwell</p> <p style="text-align: center;"><i>Data-Driven Decision Making in Resilience</i> Nathan DeBardeleben Los Alamos National Laboratory</p> <p style="text-align: center;">-----</p> <p style="text-align: center;"><i>Revisiting Checkpointing for Exascale-Class Systems</i> Kurt Ferreira Sandia National Laboratories</p> <p style="text-align: center;">-----</p> <p style="text-align: center;"><i>Scalable Program Analyses to Improve Software Reliability</i> Cindy Rubio-Gonzalez University of California, Davis</p>	<p style="text-align: center;">Session 4</p> <p style="text-align: center;">Data Analysis on Uncertain Data Chair – Allen McPherson</p> <p style="text-align: center;"><i>Relaxing Resilience Data Quality Requirements Due to Visualization and Analysis Needs</i> James Ahrens Los Alamos National Laboratory</p> <p style="text-align: center;">-----</p> <p style="text-align: center;"><i>Living with "Dirty" Data While Avoiding Exascale "Garbage In, Garbage Out"</i> Michael McKerns California Institute of Technology</p> <p style="text-align: center;">-----</p> <p style="text-align: center;"><i>Approximate Computing for Approximate Data</i> Martin Rinard Massachusetts Institute of Technology</p>
10:00 am		Break	Break	Break
10:30 am		<p style="text-align: center;"><i>New Resilience Capabilities with Micron's HMC</i> David Resnick Sandia National Laboratories</p>	<p style="text-align: center;"><i>Fault Tolerant Programming Abstractions and Failure Recovery Models for MPI Applications</i> Ignacio Laguna Peralta Lawrence Livermore National Laboratory</p>	<p style="text-align: center;"><i>Towards Interactive Analysis and Exploration of the HPC Performance Landscape</i> Yarden Livnat University of Utah</p>
11:00 am		Panel Discussion	Panel Discussion	Panel Discussion
12:00 pm		Lunch: Council House	Lunch and Dinner on your own	Lunch: Council House
1:30 pm		<p style="text-align: center;">Session 2</p> <p style="text-align: center;">Resilient Numerical Methods Chair – Brian Carnes</p> <p style="text-align: center;"><i>Bend but Don't Break: Prospects for Resilience without Recovery in Algorithms for Hyperbolic Systems</i> Jeffrey Hittinger Lawrence Livermore National Laboratory</p> <p style="text-align: center;">-----</p> <p style="text-align: center;"><i>Fault Tolerance in Numerical Library Routines</i> Jack Dongarra University of Tennessee</p> <p style="text-align: center;">-----</p> <p style="text-align: center;"><i>On Numerical Resiliency in Numerical Linear Algebra Solvers</i> Luc Giraud Inria</p>	No scheduled session	<p style="text-align: center;">Session 5</p> <p style="text-align: center;">Future Application Development Environment Chair – Bert Still</p> <p style="text-align: center;"><i>Three Crazy Ways to Cope with Failure That Will Change Your Apps Forever</i> Sung-Eun Choi Cray, Inc.</p> <p style="text-align: center;">-----</p> <p style="text-align: center;"><i>Quantitatively Modeling Application Resilience with the Data Vulnerability Factor</i> Jeffrey Vetter Georgia Tech</p> <p style="text-align: center;">-----</p> <p style="text-align: center;"><i>Global View Resilience: Flexible, Portable, Scalable Application Recovery for Fail-Stop and "Silent" Errors</i> Andrew Chien University of Chicago</p>
3:00 pm		Break		Break
3:30 pm		<p style="text-align: center;"><i>Application Structure Aware Resiliency and Cost Model for Differentiated Recovery</i> Anshu Dubey Lawrence Berkeley National Laboratory</p>		<p style="text-align: center;"><i>Exploiting the User's Knowledge of Resilience</i> Robert Lucas Information Sciences Institute</p>
4:00 pm	Registration (Salal Room) 4:30-7:00 PM	Panel Discussion		Panel Discussion
6:00 pm	<p style="text-align: center;">Welcome/Keynote Address (Long House)</p> <p style="text-align: center;"><i>Failure, Resilience, Opportunity and Innovation</i> John Daly Department of Defense</p>	<p style="text-align: center;">Working Dinner/Speaker (Council House)</p> <p style="text-align: center;"><i>Why HPC Matters</i> Eng Lim Goh Silicon Graphics International Corp.</p>	<p style="text-align: center;">5:00 – 8:00 PM Random Access <i>(Sign up to speak for 10 minutes)</i></p> <p style="text-align: center;">(Long House)</p>	Informal Discussions Council House
8:00 pm	Informal Discussions Council House <i>(Immediately following Keynote)</i>	Informal Discussions Cedar Tree Room <i>(Immediately following Working Dinner)</i>	Student Poster Session Informal Discussions Council House	